

REMARKS

Claims 8-10, 12-15, 40-44 and 52-79 are pending in this application. The Office Action withdraws from consideration claims 22-23, 35-38, and 45-51. By this Amendment, claims 11, 22-23, 35-38, and 45-51 are cancelled, claims 8, 40, 42 and 44 are amended, and claims 52-79 are added. Reconsideration and withdrawal of the rejections in view of the foregoing amendments and the following remarks is respectfully requested.

I. Claim Rejection 35 U.S.C §112

The Office Action rejects claim 11 under 35 U.S.C §112. Because claim 11 has been cancelled, this rejection is moot.

II. Claim Rejection 35 U.S.C. §102

The Office Action rejects claim 8 under 35 U.S.C §102(b) over U.S. Patent No. 5,720,720 to Laske et al. (hereinafter "Laske"). This rejection is respectfully traversed.

Applicant respectfully submits that Laske is directed to a method of high flow microinfusion which provides convection enhanced delivery of agents into the brain and other solid tissue. Figures 10, 11 and 12 of Laske show a single infusion catheter 1 with a diffusion tip for insertion into a tumor 3. The infusion catheter 1 is connected to a syringe 5 of a programmable syringe pump 7 with a connecting tube 4. The infusion catheter 1 includes a tapered end portion 8 which ends in a tip 9 and also includes a plurality of parallel slit openings

10. Parallel slit openings 10 are disposed proximate to the tapered end portion 8 of the single catheter 1.

Accordingly, Laske neither discloses nor suggests a plurality of microinfusion catheters configured to be inserted into the hypothalamus of a patient's brain. Thus, independent claim 8 is in allowable condition, and Applicant respectfully requests that the rejection of claim 8 be withdrawn.

III. Claim Rejection 35 U.S.C. §103

The Office Action rejects claims 11 and 40 under 35 U.S.C §103(a) over Laske in view of Corrales. Claim 11 has been cancelled and thus its rejection is moot. This rejection of claim 40 is respectfully traversed.

For at least the reasons discussed above with respect to independent claim 8, from which it depends, as well as for its added features, claim 40 is allowable over the proposed Laske-Corrales combination. Further, Corrales fails to overcome the deficiencies of Laske discussed with respect to independent claim 8 above. That is, Corrales is directed to means for introducing and guiding objects into body cavities or blood vessels of a patient. The single figure of Corrales shows a cannula 3 which has been inserted through a hole 1 in a patient's calvarium. Within the cannula 3 is an extremely flexible catheter 7, and within the extremely flexible catheter 7 is an extremely flexible chain 4. On the end of the extremely flexible chain 4 is a weight 5. By

suitably positioning the patient, the extremely flexible chain 4 and weight 5 can guide the extremely flexible catheter 7 to its target.

The Office Action asserts that, in column 3, lines 14-31, Corrales teaches a plurality of microcatheters. However, Corrales merely uses a blanket plural term when discussing the advantages of the invention in column 3, lines 14-31. Corrales does not disclose, as can be clearly seen in the sole figure, a plurality of microinfusion catheters, but instead discloses a single catheter. In point of fact, Corrales teaches away from multiple catheters because the specification notes at column 2, lines 65-68, that "the chain must be able to move freely in the catheter with a minium of friction, and the catheter must be able to move freely in the cannula." Accordingly, multiple catheters confined in the Corrales cannula would interfere with the free motion of one another and render the device inoperable.

Further, there would have been no motivation, teaching or suggestion in Corrales to modify Laske to include a plurality of microinfusion catheters. In fact, the Examiner does not discuss specifically how one of ordinary skill in the art would have modified Laske in view of Corrales. Finally, neither Laske or Corrales discloses or suggests housing a plurality of microinfusion catheters in a macrocatheter. Accordingly, the rejection of claim 40 should be withdrawn.

The Office Action rejects claims 9 and 10 under 35 U.S.C §103(a) over Laske in view of U.S. Patent No. 3,941,119 to Corrales and further in view of U.S. Patent No. 3,674,014 to Tillander. This rejection is respectfully traversed.

Corrales and Tillander fail to overcome the deficiencies of Laske discussed above with respect to independent claim 8, from which claims 9 and 10 depend. Thus, for at least the reasons discussed above with respect to independent claim 8, as well as for their added features, claims 9 and 10 distinguish over the applied combination. Moreover, neither Corrales nor Tillander discloses or suggests a plurality of microinfusion catheters configured to be inserted into the hypothalamus of a patient's brain.

The Office Action rejects claims 12 and 42-44 under 35 U.S.C §103(a) over Laske in view of U.S. Patent No. 5,041,107 to Heil. This rejection is respectfully traversed.

Heil is cited merely for teaching: 1) a drug reservoir/pump that is capable of pumping a drug at a variable rate; 2) at least one microinfusion catheter configured such that each of the plurality of drug delivery ports can be independently controlled; 3) monitoring electrodes; and 4) a controller functionally coupled to at least one microinfusion catheter, and thus does not overcome the deficiencies of Laske discussed above. Claims 12 and 42-44 depend from claim 8. Thus, for at least the reasons discussed above with respect to independent claim 8, as well as for their added features, Applicant respectfully submits that claims 12 and 42-44 distinguish over the applied combination. Accordingly, the rejection should be withdrawn.

The Office Action rejects claims 13-15 under 35 U.S.C §103(a) over Laske in view of U.S. Patent No. 4,871,351 to Feingold. This rejection is respectfully traversed.

Feingold is cited merely for teaching a drug reservoir/pump capable of pumping a drug at a variable rate, and the variable rate capable of being controlled percutaneously by a radio

control unit and a recharge valve accessible percutaneously, and thus does not overcome the deficiencies of Laske discussed above. Claims 13-15 depend from claim 8. Accordingly, for at least the reasons discussed above with respect to independent claim 8, as well as for their added features, Applicant respectfully submits that claims 13-15 distinguish over the applied combination, and the rejection should be withdrawn.

The Office Action rejects claim 41 under 35 U.S.C §103(a) over Laske in view of U.S Patent No. 4,940,588 to Sparks et al. (hereinafter "Sparks"). This rejection is respectfully traversed.

Sparks is cited merely for teaching an appetite-controlling drug for treating obesity, and thus, does not overcome the deficiencies of Laske discussed above with respect to independent claim 8 from which claim 41 depends. Accordingly, for at least the reasons discussed above with respect to independent claim 8, as well as for its added features, Applicant respectfully submits that claim 41 distinguishes over the applied combination, and the rejection should be withdrawn.

IV. New Claims

By this Amendment, claims 52-79 have been added. Added claims 52-79 have been drafted in view of the cited art and should also be in allowable condition.

V. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Randall H. Cherry**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP



Mark L. Fleshner
Registration No. 34,596
Randall H. Cherry
Registration No. P-51,556

P.O. Box 221200
Chantilly, VA 20153-1200
703 502-9440 MLF/RHC:mlc:jgm:dep
Date: August 22, 2002